APPENDIX A

Allowed Claims For
U.S. Patent Application No. 09/357,429 filed July 20, 1999

11. An access point for communicatively coupling a first roaming wireless device and a second roaming wireless device to a wired link, the access point comprising:

a housing;

a control circuit disposed in the housing;

a wired transceiver, disposed in the housing that is communicatively coupled to the control circuit and the wired link;

a first wireless transceiver, disposed in the housing, that is communicatively coupled to the control circuit, the first wireless transceiver operating on a first wireless communication channel to communicatively couple with the first roaming wireless device;

a second wireless transceiver, disposed in the housing, that is communicatively coupled to the control circuit, the second wireless transceiver operating on a second wireless communication channel to communicatively couple with the second roaming device; and

the control circuit accommodates communications between the first wireless transceiver and the second wireless transceiver exclusive of the wired link.

12. The access point of claim 11, further comprising a bus interface communicatively coupling the control circuit to the first and second wireless transceivers and the wired transceiver.

13. The access point of claim 12, wherein the bus interface is substantially compliant with a bus standard.

14. The access point of claim 13, wherein the bus standard is the PCI standard.

15. The access point of claim 11, wherein the wired transceiver accommodates communication with an ethernet network.

16. The access point of claim 11, wherein the wired transceiver accommodates communication with a token-ring network.

17. The access point of claim 11, wherein the wired transceiver accommodates communication with an asynchronous transfer mode network.

18. The access point of claim 11, wherein the wired transceiver accommodates communication with a packetized network.

19. The access point of claim 11, wherein the first wireless transceiver supports a substantially non-deterministic media access protocol and the second wireless transceiver supports a substantially deterministic media access protocol.

20. The access point of claim 11, wherein the first wireless transceiver and the second wireless transceiver support substantially distinct non-deterministic media access protocols.

21. The access point of claim 11, wherein the first wireless transceiver and the second wireless transceiver operate independently to form a first communication cell and a second communication cell.

22. The access point of claim 11, wherein the control circuit synchronizes transmissions on the first radio channel and the second radio channel to minimize conflicts between transmissions on one wireless transceiver and receipts on the other wireless transceiver.

23. The access point of claim 11, wherein the wired link is a local area network.

24. An access point for establishing communications with a wired link, the access point comprising:

a first wireless transceiver operating to establish a first wireless cell;

a second wireless transceiver operating to establish a second wireless cell;

the first and second wireless transceivers operating such that the first and second cells are substantially overlapping;

a control circuit that communicatively couples the first and second wireless transceivers to one another;

a wired transceiver that communicatively couples the control circuit to the wired link; and

the control circuit communicatively couples the first wireless transceiver and the wired transceiver.

25. The access point of claim 24, wherein the first and second wireless transceivers each comprise processing circuitry that supports a communication protocol.

26. The access point of claim 24, wherein the control circuit allows communications between the first wireless transceiver and the second wireless transceiver exclusive of the wired link.

27. The access point of claim 24, wherein the first wireless transceiver supports a substantially non-deterministic media access protocol and the second wireless transceiver supports a substantially deterministic media access protocol.

28. The access point of claim 24, wherein the first wireless transceiver and the second wireless transceiver support substantially distinct non-deterministic media access protocols.

29. A communication network comprising:

a wired LAN;

a plurality of access points coupled via the wired LAN, each of the plurality of access points comprising:

a housing;

a control circuit disposed in the housing;

a wired transceiver, disposed in the housing, that is communicatively coupled to the control circuit and the wired LAN;

a first wireless transceiver, disposed in the housing, that is communicatively coupled to the control circuit and operates on a first wireless communication channel;

a second wireless transceiver, disposed in the housing, that is communicatively coupled to the control circuit and operates on a second wireless communication channel; and

the control circuit accommodates communications between the first wireless transceiver and the second wireless transceiver exclusive of the wired LAN;

a first roaming wireless device comprising a third wireless transceiver that operates on the first wireless communication channel; and

a second roaming wireless device comprising a fourth wireless transceiver that operates on the second wireless communication channel.

30. The communication network of claim 29, wherein the first roaming device operates only on the first wireless communication channel.

31. The communication network of claim 29, wherein the first roaming wireless device and the second roaming wireless device have different transmission characteristics.

32. The communication network of claim 29, wherein the first roaming device and the second roaming wireless device incorporate different data throughput capabilities.

33. The communication network of claim 29, wherein the first roaming wireless device and the second roaming wireless device operate independently to form a first communication cell and a second communication cell, respectively.

34. The communication network of claim 29, wherein the radius of the first communication cell substantially equals the radius of the second communication cell.

35. The communication network of claim 29, wherein the wired transceiver accommodates communication with an Ethernet network..

36. The communication network of claim 29, wherein the wired transceiver accommodates communication with a token-ring network..

37. The communication network of claim 29, wherein the wired transceiver accommodates communication with an asynchronous transfer mode network..

38. The communication network of claim 29, wherein the wired transceiver accommodates communication with a packetized network.

39. The communication network of claim 29, wherein the first wireless transceiver supports a substantially non-deterministic media access protocol and the second wireless transceiver supports a substantially deterministic media access protocol.

40. The communication network of claim 29, wherein the first wireless transceiver and the second wireless transceiver support substantially distinct non-deterministic media access protocols.

41. The communication network of claim 29, wherein the third wireless transceiver is a PCMCIA card.

42. A communication system, comprising:

a wired LAN;

a plurality of access points coupled via the wired LAN, each of the plurality of access points comprising:

a housing;

a control circuit disposed in the housing;

a wired transceiver, disposed in the housing, that is configurable to communicatively couple the control circuit to the wired LAN;

a first wireless transceiver, disposed in the housing, that is communicatively coupled to the control circuit, the first wireless transceiver operating pursuant to a substantially deterministic, time bounded wireless communication protocol; and

a second wireless transceiver, disposed in the housing, that is communicatively coupled to the control circuit, the second wireless transceiver operating pursuant to a substantially non-deterministic contention access wireless communication protocol; and

a plurality of roaming wireless devices that each wirelessly communicate with at least one of the first and second wireless transceivers.

43. The access point of claim 11, wherein the first wireless transceiver and the second wireless transceiver have substantially different operating characteristics.

44. The communication network of claim 29, wherein the first wireless communication channel is a radio frequency (RF) channel.

45. An access point for establishing communications with a wired link, the access point comprising:

processing circuitry operating to send and receive data according to a first protocol; and

interface circuitry operable to:

receive data from the processing circuitry according to the first protocol;

send data to a plurality of wireless transceivers operating on independent wireless communication channels, according to at least a second protocol independent of the first protocol;

send data to a wired transceiver operating on the wired link, according to a third protocol independent of the first and second protocols;

receive data from the plurality of wireless transceivers according to at least the second protocol independent of the first protocol;

receive data from the wired transceiver according to the third protocol independent of the first and second protocols; and

send data to the processing circuitry according to the first protocol.

46. The access point of claim 45, wherein the second and third protocols are the same and comply with PCI bus standards.

47. The access point of claim 45, wherein the processing circuitry is programmed with a network configuration to selectively route data through the interface circuitry to the plurality of wireless transceivers and the wired link.

48. The access point of claim 45, further comprising at least one acceptor for modularly receiving the plurality of wireless transceivers.

49. The access point of claim 48, wherein the plurality of transceivers are carried by at least one PCMCIA card.

50. The access point of claim 45, wherein the plurality of wireless transceivers operate independently to form a plurality of communication cells.

51. The access point of claim 50, wherein the plurality of communication cells are formed by the plurality of wireless transceivers operating at different data rates.

52. The access point of claim 50, wherein the plurality of communication cells are formed by the plurality of wireless transceivers operating at different power levels.

53. The access point of claim 45, wherein the independent wireless communication channels are differentiated by a characteristic selected from the group consisting of frequencies, modulation schemes and code spreading schemes.

54. An access point for establishing communications with a wired link, the access point comprising:

a housing;

a PCMCIA interface capable of modularly receiving into the housing a plurality of wireless transceivers for operating on independent wireless communication channels;

a wired transceiver in the housing operating on the wired link;

interface circuitry in the housing operable to communicate with wireless transceivers

modularly received via the PCMCIA interface and with the wired transceiver; and

processing circuitry in the housing coupled to the interface circuitry to control communications by the wireless transceivers modularly received via the PCMCIA interface and by the wired transceiver.

55. The access point of claim 54, wherein the interface circuitry comprises a PCI bus interface for communicating with the wireless transceivers modularly received via the PCMCIA interface and with the wired transceiver according to PCI bus standards.

56. The access point of claim 54, wherein the processing circuitry is programmed with a network configuration to selectively route data through the interface circuitry to the plurality of wireless transceivers and the wired link.

57. The access point of claim 54, wherein the plurality of wireless transceivers operate independently to form a plurality of communication cells.

58. The access point of claim 57, wherein the plurality of communication cells are formed by the plurality of wireless transceivers operating at different data rates.

59. The access point of claim 57, wherein the plurality of communication cells are formed by the plurality of wireless transceivers operating at different power levels.

60. A communication system, comprising;

a wired LAN;

a plurality of access points coupled via the wired LAN, each of the plurality of access points comprising:

a housing;

a control circuit disposed in the housing;

a wired transceiver, disposed in the housing, that is configurable to communicatively couple the control circuit to the wired LAN; and

a wireless transceiver system, disposed in the housing, that is communicatively coupled to the control circuit, the wireless transceiver system contemporaneously operating on first and second communication channels; and

a plurality of roaming wireless devices that each wirelessly communicate with the wireless transceiver system using at least one of the first and second communication channels.

61. An access point for establishing communications with a wired link, the access point comprising:

a housing;

an interface system for modularly receiving into the housing a plurality of wireless transceivers for operating on independent wireless communication channels;

interface circuitry in the housing operable to communicate with wireless transceivers modularly received via the interface system; and

processing circuitry in the housing coupled to the interface circuitry to control communications effected by wireless transceivers modularly received via the interface system.

62. The access point of claim 61, wherein the interface system is configured to receive a plurality of cards each carrying at least one of the plurality of wireless transceivers.

63. The access point of claim 62, wherein the plurality of wireless transceivers carried by the plurality of cards have substantially different operating characteristics.

64. An access point for establishing communications with a wired link, the access point comprising:

a housing;

receiving means for modularly receiving into the housing a plurality of wireless transceivers for operating on independent wireless communication channels;

interface means in the housing for communicating with wireless transceivers modularly received by the receiving means; and

processing means in the housing coupled to the interface means for controlling communications by wireless transceivers modularly received by the receiving means.

65. A method of establishing communications with a wired link through an access point, the method comprising:

modularly receiving at least one wireless transceiver in the access point, the at least one wireless transceiver being selected from a plurality of wireless transceivers operating on independent wireless communication channels; and

communicating data and control information with the at least one wireless transceiver modularly received in the access point according to at least one protocol selected from a plurality of protocols supported by the plurality of wireless transceivers operating on independent wireless communication channels.